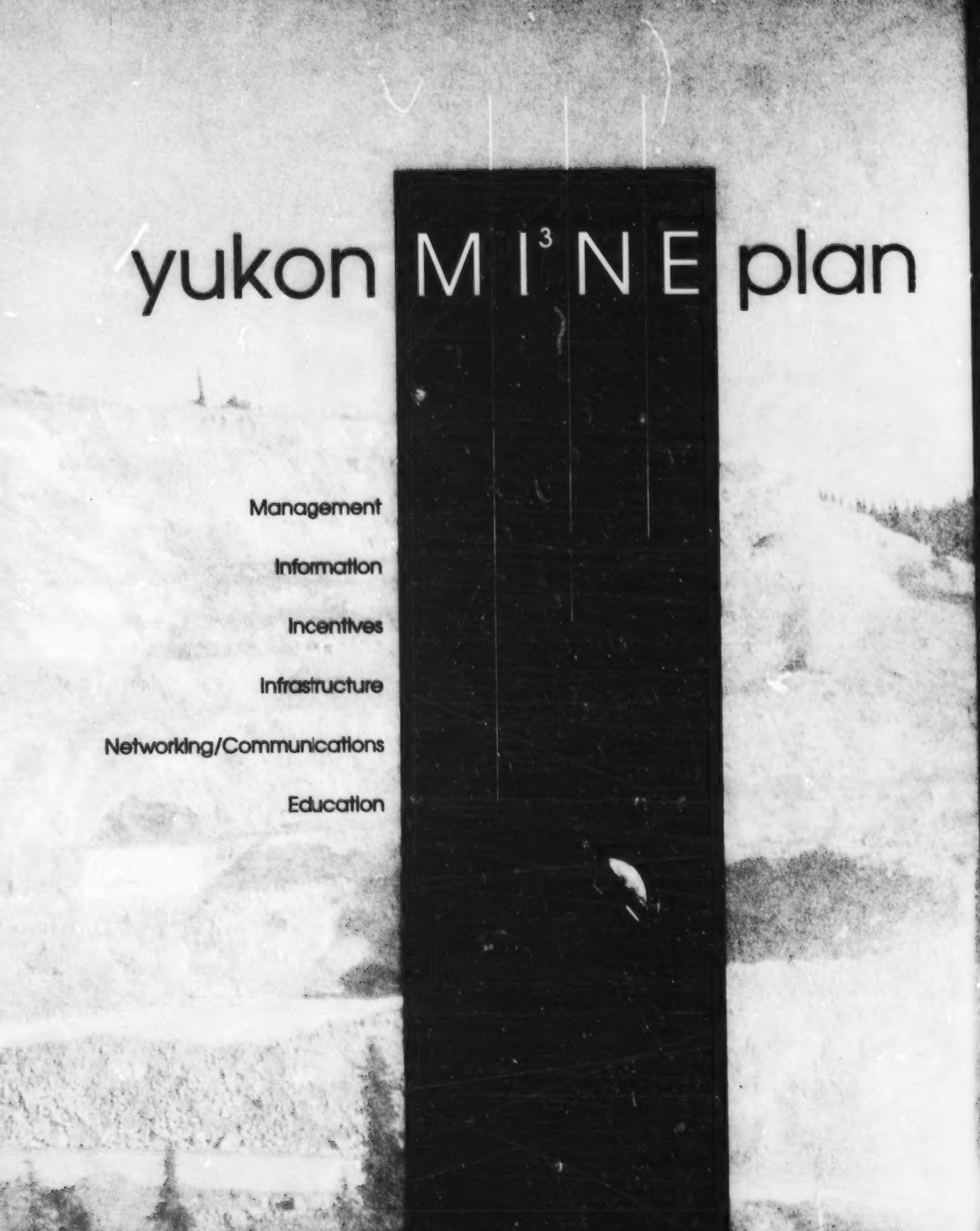

yukon MI3NE plan
Management
Information
Incentives
Infrastructure
Networking/Communications
Education

yukon MINERAL plan

Management

Information, Incentives, Infrastructure

Networking / Communications

Education

Brewery Creek *Don Murphy photo*

Government's role in building a healthy industry requires action in six areas: Management, Information, Incentives, Infrastructure, Networking/Communications and Education. This strategy is divided into four sections, each one representing a letter of MINE, and outlining specific objectives and plans for each area.

This MINE Plan is intended to be a living document. It will be reviewed on a regular basis and may be amended and updated in response to changing circumstances and recommendations from the public, stakeholders or industry. Your comments and suggestions for improvements are welcome at any time.

This plan presents new ideas for public discussion. Your comments are sought on these new ideas, particularly the proposed changes to the Schedule of Work Representation. We would like to hear from you by March 31, 2002. Additional comments and recommendations are always welcome.

Please send your comments to:

Government of the Yukon
Box 2703, Whitehorse, Yukon Y1A 2C6

Fax or e-mail your comments to:
fax: (867) 667-8601
e-mail: mining@gov.yk.ca

If you have questions about the plan, call:
(867) 667-3422 or
toll free 1-800-661-0408 local 3422

The Yukon MINE plan can
also be found on our website at:
www.yukonmining.com

MESSAGE FROM THE MINISTER

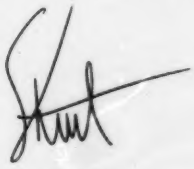
I am pleased to release our Yukon MINE Plan. This plan outlines our government's vision, objectives and action plans in support of this important industry.

Mining has always played an important role in the evolution and development of the Yukon. With the rich mineral potential and promising new projects on the horizon, this industry will continue to play a significant role in our economy and the lives of many Yukoners. Mining is a key component of the sustainable development I see for the future of the Yukon.

We are already moving quickly to achieve the goals outlined in this plan. Improvements to the permitting process have been made. Improvements to Yukon's highway infrastructure are planned. The Yukon Mineral Exploration Tax Credit has been increased and extended. Funding for the Yukon Mining Incentives Program has also been increased. The timing for completion of devolution is resolved. Important environmental research is underway. Progress is being made on the settlement of outstanding land claims.

In addition, we have continued our support for the important work of the Yukon Geology Program. Top quality geoscientific information to the industry continues to be a priority for this government.

I look forward to working closely with the industry in implementing this plan and realizing our vision of a sustainable, competitive and healthy mining industry in the future.



Scott Kent

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YTG photo

Introduction

This Yukon MINE Plan sets a course for achieving a revitalized mineral industry in the Yukon.

THE NEED FOR A MINE PLAN

This plan is part of the government's overall goal to create a business climate that attracts investment. Yukon people will benefit with more employment and training options with a revitalized mining sector.

The MINE Plan reflects a broader effort to build a sustainable economy by attracting investment that supports the creation of jobs and business opportunities in all sectors while recognizing resource-based industries will remain a central part of that economy.

The premise that responsible mining can make an important contribution to the Yukon's goal of sustainable development is the basis of the plan. Mining rights have been granted over approximately three per cent of the Yukon, but only a small fraction of this area has seen advanced exploration, and an even smaller area has seen mining development. This means that there is still great potential to discover more resources that can provide economic benefits to Yukon people. With appropriate management, guided by the principles in this plan, the mining industry can continue to play a key role in the Yukon economy well into the new century.

This plan builds on a solid foundation. The *Metal and Minerals Policy* of the Government of Canada defines the federal government's role and jurisdiction in mineral resource development. It also provides a basis for forging a renewed partnership with Natural Resources Canada as a new federal partner in the areas of science and technology, environmental protection and international trade and investment.

Many of the commitments in the Whitehorse Mining Initiative are satisfied in the plan.

This plan is our first step toward providing public policy that encourages the growth of a stable, profitable and environmentally responsible industry to provide economic opportunities and community benefits for all Yukoners today and in the future.

The Yukon MINE Plan builds on the following national policy initiatives:

- ***The Minerals and Metals Policy of the Government of Canada: Partnerships in Sustainable Development***
  Completed in 1996, this fulfills commitments in the federal government's Mining Agenda, and incorporates many of the principles in the Whitehorse Mining Initiative.

- ***Whitehorse Mining Initiative; Leadership Council Accord***
  The vision of a socially, economically and environmentally sustainable and prosperous mining industry is achieved through the implementation of many of the principles and goals of the *Whitehorse Mining Initiative* in this strategy.

IMPORTANCE OF MINING TO YUKON

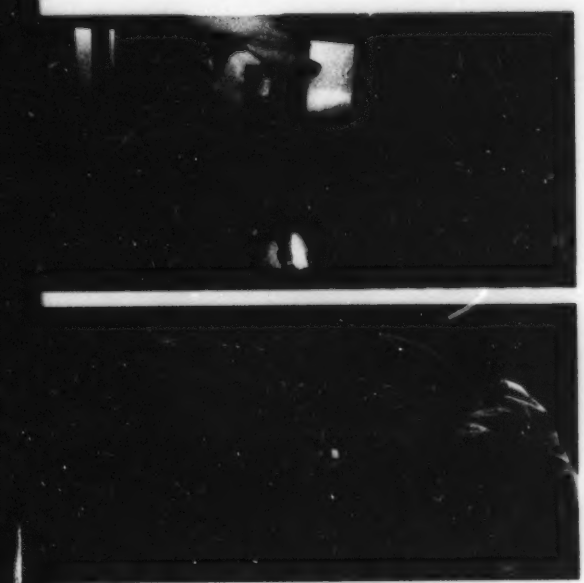
Mining has played a key role in the social and political development of the Yukon for more than 100 years. The influx of prospectors during the Klondike Gold Rush created a requirement for better administration that led to the formation of the Yukon Territory. Over the last 100 years, more than 16 million ounces of gold have been produced. Since 1960, Yukon has had 12 significant hard rock mines in production.

The Yukon's economy remains small and specialized, and will continue to be impacted by the natural resource industries, particularly mining. No other sector of the northern economy can produce as much wealth from a small fraction of the land base as mining and the oil and gas industries can. While work toward diversification of the economy continues, the strong relationship between the health of the mining sector and the strength of the overall economy will remain. This reinforces the importance of a plan that can restore this sector.

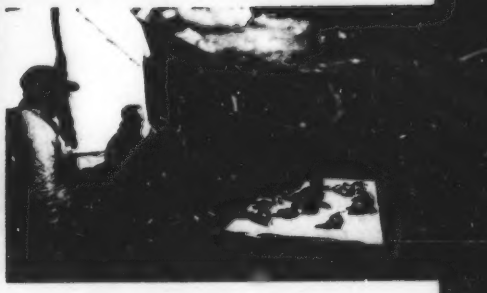
Many of the benefits Yukon residents enjoy today come from infrastructure such as roads, bridges, electrical power facilities and entire town sites originally developed to service the mineral industry. Other sectors of the economy, such as tourism and forestry, can now take advantage of this infrastructure. Furthermore, growth in the mineral industry leads to new infrastructure requirements and employment opportunities in the construction of new facilities.

The mineral industry is the most significant private sector economic force in the Yukon. Over the period 1986 to 2000, the mining sector accounted for as much as 28 per cent of the total Yukon Gross Domestic Product. In 1997, the mining sector alone accounted for 12 per cent of the Yukon Gross Domestic Product; more recently in 2000 it accounted for 4.6 per cent of the Yukon Gross Domestic Product. Mining jobs also pay well. Employees earn 1.7 times the business sector average.

The mining sector can continue to play a key role as an economic engine of the territory by financing infrastructure, supporting local businesses and providing high paying jobs.



top – examining core samples *YTG photo*
bottom – *YTG photo*



Examples of Yukon infrastructure built to support the mineral and other resource industries:

- Towns of Dawson, Mayo, Faro, Elsa, Whitehorse
- Aishihik Lake Hydro Facility (originally built to provide power to Faro mine)
- Klondike Highway (overland access to Dawson gold fields)
- Top of the World Highway (access to Clinton Creek mine and important placer gold districts)
- Dempster Highway (built under the federal Roads to Resources Program)
- Robert Campbell Highway (built under the federal Roads to Resources Program)
- Mount Freegold Road (access to important mineral properties and placer gold mines)
- Annie Lake Road (access to Mount Skukum gold mine and other mineral properties)
- Mount Nansen Road (to important gold properties and placer mines)
- White Pass and Yukon Route Railway

OUR VISION

A healthy and sustainable mineral industry that contributes to the social and economic well-being of all Yukoners.

Achieving our vision requires restoring the Yukon mining industry by creating an attractive investment climate for the benefit of all Yukoners.

Yukon companies that rely on the mineral industry can take advantage of 'boom years' to expand markets and diversify so that they can thrive even when mining activities decrease.

left – Nels and Madeline Harper of Clear Creek *Daniel Héon photo*
centre – Pacific Ridge Exploration's JRV property *Ken Galambos photo*
right – Dawson City, home of the world's greatest gold rush *YTG photo*

The Elements of an Attractive Investment Climate

Mineral exploration and development is expensive and there is no assurance minerals will be found. With the high risk inherent in this search, there are important criteria that investors consider before investing:

- a stable political climate that encourages mining investment;
- an environment that can reconcile conflicting and competing interests and provide certainty of tenure by completing the Yukon Protected Areas Strategy efficiently and fairly;
- an environmental assessment and regulatory regime that is timely, fair and predictable;
- the possibility of quality projects or prospects with the potential to attract risk capital;
- a competitive tax regime that supports an acceptable return on investment;
- competitive foreign investment rules that protect capital investment and permit repatriation of profits;
- a history of government encouraging private sector investment in the region;
- government policy that supports energy and transportation infrastructure development;
- the availability of services, supplies and a skilled workforce at a competitive cost.

There has been special consideration to these criteria in the design of this Plan. Achieving our vision for this industry will be measured by our success in meeting the criteria for a successful investment climate.

OUR OBJECTIVES

To achieve this vision, five strategic objectives have been identified. By achieving these objectives, we also realize the vision.

- To restore the Yukon mining industry so it can once again provide an important contribution to the Yukon economy.
- To ensure the minerals industry conducts its activities in an environmentally and socially responsible manner.
- To ensure environmental management and protection measures consider economic impacts.
- To ensure access to and wise use of mineral resources in a manner that optimizes the long-term social, environmental and economic benefits and opportunities for Yukoners.
- To improve understanding of inter-relationships among geology, mineral resources, the industry, the environment and the economy.

left – Premier Pat Duncan with geologists at Finlayson Lake region *YTG photo*
right – helicopter supported diamond drilling *DIAND photo*
below – *Yukon Archives, Historical Society Collection*

OUR PRINCIPLES

This plan is also based on fundamental principles that will guide the actions and plans in achieving our visions for this industry.

prospector Pete Risby *Ken Galambos photo*

1. Certainty

Access to land for mineral exploration and development is a fundamental requirement of a successful mineral industry. Certainty of mineral tenure is critical to ensuring continued investment.

2. Respect for the rights of First Nations

Yukon First Nations have rights protected under the *Constitution Act* and the Yukon First Nations Final Agreements and self-government agreements. Of particular interest to the mineral industry are the rights and responsibilities in these agreements that apply to lands and resources as they may affect non-renewable resource development in the Yukon. The government recognizes the jurisdiction of First Nations, established in legislation – agreements that provide certainty for the mining industry and investors and new opportunities and responsibilities for the Yukon's First Nations people. The government will be working closely with First Nations to ensure the implementation of the Yukon MINE Plan is consistent with these agreements.

3. Respect for environmental and community values

The Yukon government is committed to maintaining a balance between temporary land use for mining, meeting the needs of Yukon communities and people and a long-term approach to environmental protection and stewardship.

The Yukon government is also responsible for developing policies and programs as a foundation for a responsible administrative regime for the mineral resource industry. These policies and programs must meet the needs of the communities, the industry and the public.

4. Economic well-being through sustainable development

The mining industry has been a significant part of the Yukon economy for more than 100 years. The Yukon government recognizes the benefits to Yukon people of responsible and sustainable mineral resource development.

5. Cooperation

To be successful in achieving the vision of a revitalized industry, all stakeholders need to continue efforts to work together. The Yukon government needs to be responsive to industry requirements while supporting the goals and values of Yukon people. Many Yukoners are concerned about this industry and wish to participate in the decisions that will affect the future of mining in the Yukon. Government will work closely with the mining industry, Yukon businesses, First Nations, the various boards established under the land claims legislation, conservation groups, individuals and organizations that have an interest in the future of mining in the territory.

OUR MINE PLAN – MANAGEMENT

Good management is the foundation of an attractive investment climate.

Devolution

Devolution of the responsibility for natural resources from the federal government to the Yukon government will be the most important step in the history of the Yukon in more than 100 years. This will bring important new responsibilities to the Yukon government. When complete the Yukon will have the ability to make important decisions about the management of lands, water, forest and minerals here at home.

OUR GOAL:

Complete the transfer of the responsibility for natural resources to the Yukon.

OUR PLAN:

Devolution is set to take place in 2003. To ensure a smooth transition, mirror versions of the existing federal legislation will be enacted. The Yukon government acknowledges the importance of the existing system of mineral tenure in providing certainty to the mineral industry. As the Yukon takes over the responsibility for significant new resource legislation, there will be a time of transition and learning. During this transition, the Yukon will focus attention on administrative improvements that can be made without changes to the legislation.

Liability to the Yukon government for mine sites that were permitted by the federal government was a significant issue in the negotiations for devolution. After devolution the federal government will be responsible for certain mine sites that have been managed under federal authority. The Yukon government will be responsible for sites that are permitted under Yukon authority after devolution.

Left – Shawn Ryan, Hem Property *Ken Galambos photo*
Right – core samples, skarn with chalcopyrite *Ken Galambos photo*

Administrative Improvements: Finding Ways to Help

Yukon prospectors are facing one of the most difficult economic environments in many years. During this period, the cost associated with maintaining mineral interests can be a burden that was not intended by the legislation. The Schedule of Work Representation and Quartz Grouping Guidelines under the *Yukon Quartz Mining Act* and the Schedule of Representation and Placer Grouping Guidelines under the *Yukon Placer Mining Act* outline the administrative requirements that must be satisfied to maintain mining claims in good standing.

OUR GOAL

To assist claim holders by making it easier to satisfy the requirements to conduct assessment work on Yukon claims.

OUR PLAN

In response to this serious situation the following changes to the Schedule of Representation Work assessment reporting requirements are proposed to apply immediately upon devolution:

> **Claim groupings will be easier:** The groupings will be applied to mineral claims at the discretion of the claim holder and in a manner to provide maximum benefit to the claim holder.

> **Rates for physical work increased:** While actual costs can always apply, the standard rates for hand excavation and drilling will be substantially increased to reflect current costs of operating and the high cost of fuel.

> **Bonafide assessment work will no longer require prior approval from the Mining Recorder:** Surveys, road and airstrip construction, road maintenance, mobilization and reclamation work no longer require prior approval of the Mining Recorder. Reasonable costs associated with assessing and advancing an exploration property's value that may not be specifically defined in the Schedule can be applied. Activities that will be accepted will include blasting, compilations, remote sensing, costs associated with interpretation of data, report writing and pre-feasibility studies. Any environmental baseline information work or studies that can reasonably be expected in support of advancing a project will be accepted. For road maintenance activities in support of projects on mineral claims granted under the *Yukon Quartz Mining Act*, 100 per cent of costs will be accepted.

> **Electronic submission of reports permitted:** Reports may be submitted in an electronic format acceptable to the Mining Recorder, or in Microsoft Word or WordPerfect, with any accompanying maps in Arcview or Arcinfo format.

> **Relief from assessment requirements will be granted:** In order to provide immediate relief to individuals and companies that may lose their investments in mineral properties due to market conditions, relief from assessment requirements for one year will be granted to all mineral interest holders upon the effective date of devolution.

geologist Al Doherty reviewing claim map at the Mining Recorder's Office *YTG photo*

Working Towards a Comprehensive Yukon Mineral Policy

When the Yukon has responsibility for mineral resources after devolution, the Department of Natural Resources Canada (NRCan) will play an increased role as an important federal partner for geoscience and the promotion of mineral resources in the Yukon. The federal mineral policy, which was developed by NRCan, captures many of the principles of responsible management that are reflected in this plan and are important in the Yukon.

After devolution, the Yukon will be in a position to develop new policies to guide the management of the mineral industry. A comprehensive "made-in-Yukon" mineral policy that is well informed by the views of Yukon stakeholders will be needed after devolution.

OUR GOAL AND PLANS:

The Yukon government endorses the Minerals and Metal Policy of the Government of Canada as a strong foundation from which the Yukon can develop a comprehensive mineral policy tailored to our unique operating environment.

The Yukon government will host a series of technical workshops on issues relating to the management of mineral resources commencing in 2002 to discuss important issues and hear the views of Yukon stakeholders about the management of mineral resources after devolution. The results of these workshops will be used in the development of a Yukon Mineral Policy.

Minesite Management

Many Yukoners have expressed concern about the potential liability to Yukon taxpayers if future mine sites are abandoned. Responsible fiscal management requires careful consideration of this possibility with a view to managing this risk.

OUR GOAL:

To ensure there are mechanisms in place to address environmental compliance and closure requirements at all Yukon mining projects under Yukon management after devolution.

OUR PLANS:

A series of technical workshops will be held to seek public and industry views on this issue. Topics to be covered will include licensing requirements, performance bonding and enforcement. This information will inform future decisions after devolution.

Administration

OUR GOAL:

Effective implementation of improvements to the administration of the permitting process.

OUR PLAN:

There are still administrative improvements to the permitting process that can be made. The Yukon government will continue to work to see the protocol agreement between the Water Board and the Department of Indian Affairs and Northern Development (DIAND) finalized and released.

Administrative Improvements to the Permitting Process

Until devolution, the Yukon's permitting regime for mining, for the most part remains a federal responsibility. The Yukon government has been working with the federal government and other stakeholders to improve the administration of the permitting process without compromising environmental protection. These changes are captured in the companion document: *Administrative Procedures for the Environmental Assessment of Major Mining Projects in the Yukon.*

Changes have been made that will:

- help improve the quality of projects by ensuring high standards are adopted;
- improve the Yukon's reputation as a favourable place for mining investment;
- clearly indicate to industry and the public the requirements for information and mitigation;
- help the future development assessment board as it develops effective administrative practices and procedures; and
- assist in a smooth transfer of responsibilities for permitting processes under devolution.

These changes include:

- a protocol agreement between the Yukon Territory Water Board and the Department of Indian Affairs and Northern Development to harmonize administrative procedures;
- provision for a "Project Agreement" between government and the proponent to clearly establish early in the process expectations, timing, and resources required for the conduct of the review;
- comprehensive guidelines for information requirements to assist proponents in providing the correct information required for environmental assessments;
- comprehensive guidelines for design standards to provide increased certainty that project designs are achieving environmental objectives; and
- a Yukon Major Projects Advisory Committee to oversee the smooth functioning of the permitting process.

Under the Umbrella Final Agreement land claims legislation, there will be new Yukon legislation to guide the assessment of major mining projects in the Yukon. This legislation, called the Yukon Environmental and Socio-Economic Assessment Legislation, is being developed. When it is completed, the Yukon government will:

- encourage the new Yukon Development Assessment Board to work with industry so that the assessment process is effective and does not discourage investors from participating in Yukon opportunities; and
- continue to work towards administrative improvements in the environmental assessment process until the proposed Yukon Environmental and Socio-Economic Assessment Legislation is in place.

Part 2 of the *Yukon Quartz Mining Act* and *Yukon Placer Mining Act* states the purpose of mining land use regulations and Quartz Mining Production Licenses is:

'To ensure the development and viability of a sustainable, competitive and healthy mining industry that operates in a manner that upholds the essential socio-economic and environmental values of the territory.'

As part of our vision to achieve sustainable benefits to Yukon people and ensuring the mineral resources will be managed in a responsible manner, the Yukon government adopts and endorses this objective as stated in the mining legislation.

After devolution, the mineral industry will be regulated by the *Yukon Waters Act, Yukon Placer Mining Act, Yukon Quartz Mining Act* and *Yukon Lands Act*. The industry must also satisfy requirements established by the *Canadian Environmental Assessment Act, Canadian Environmental Protection Act* and the *Yukon Environment Act*.

Production Regulations

OUR GOAL:

Ensuring new regulations for producing mines achieve improved and more efficient overall governance of mining projects.

OUR PLAN:

The Yukon government is working closely with DIAND to ensure production regulations create clarity and certainty for proponents on what the requirements will be to obtain a license, in a manner that is acceptable to the industry and stakeholders. To help achieve this, the Yukon is endorsing the recommendations of the Yukon Minerals Advisory Board on this matter including that:

> the introduction of regulations be viewed as an opportunity to resolve long standing issues associated with the approval of mining projects in the territory;

> a strategic planning process on the management of mineral resources be completed; and

> regulations should provide for legal certainty and clarity.

prehistoric mastadon flowers in a reclaimed site *Karen Pelletier photo*

mining and the environment

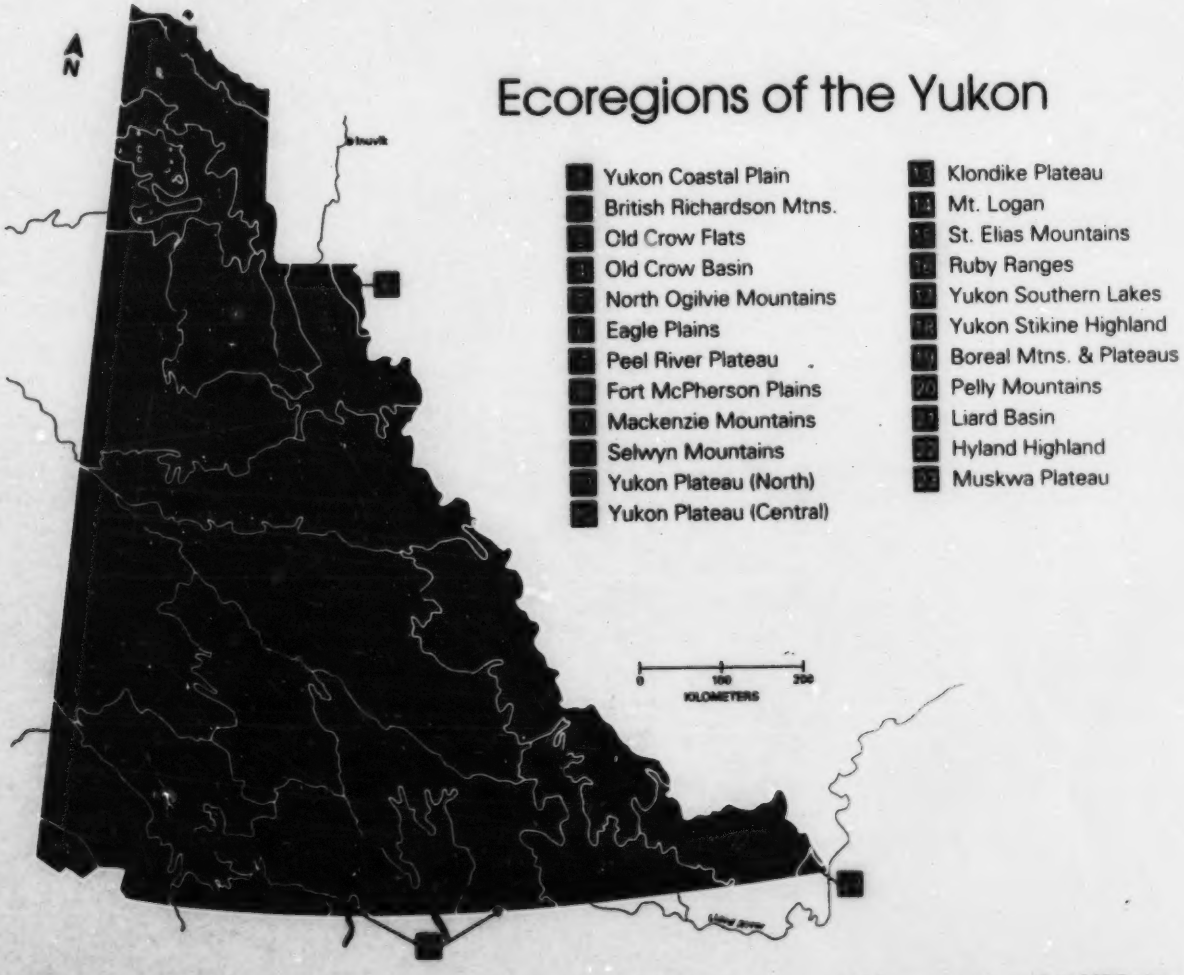
Each mining project is unique, as are its environmental and social considerations and challenges. A modern mining operation is complex. It is very important to identify and understand the potential effects of mining on the environment and to predict what should be done to mitigate the negative effects and benefit from the positive effects.

Past problems with mine sites have led to misunderstanding and even mistrust among mine developers, government regulatory agencies, stakeholders and the public. Responsible government regulation must be consistent for industry and lead to environmentally sustainable development that all Yukon people can support. It is important that the public and communities affected by mining projects are satisfied that their concerns and interests will be addressed.

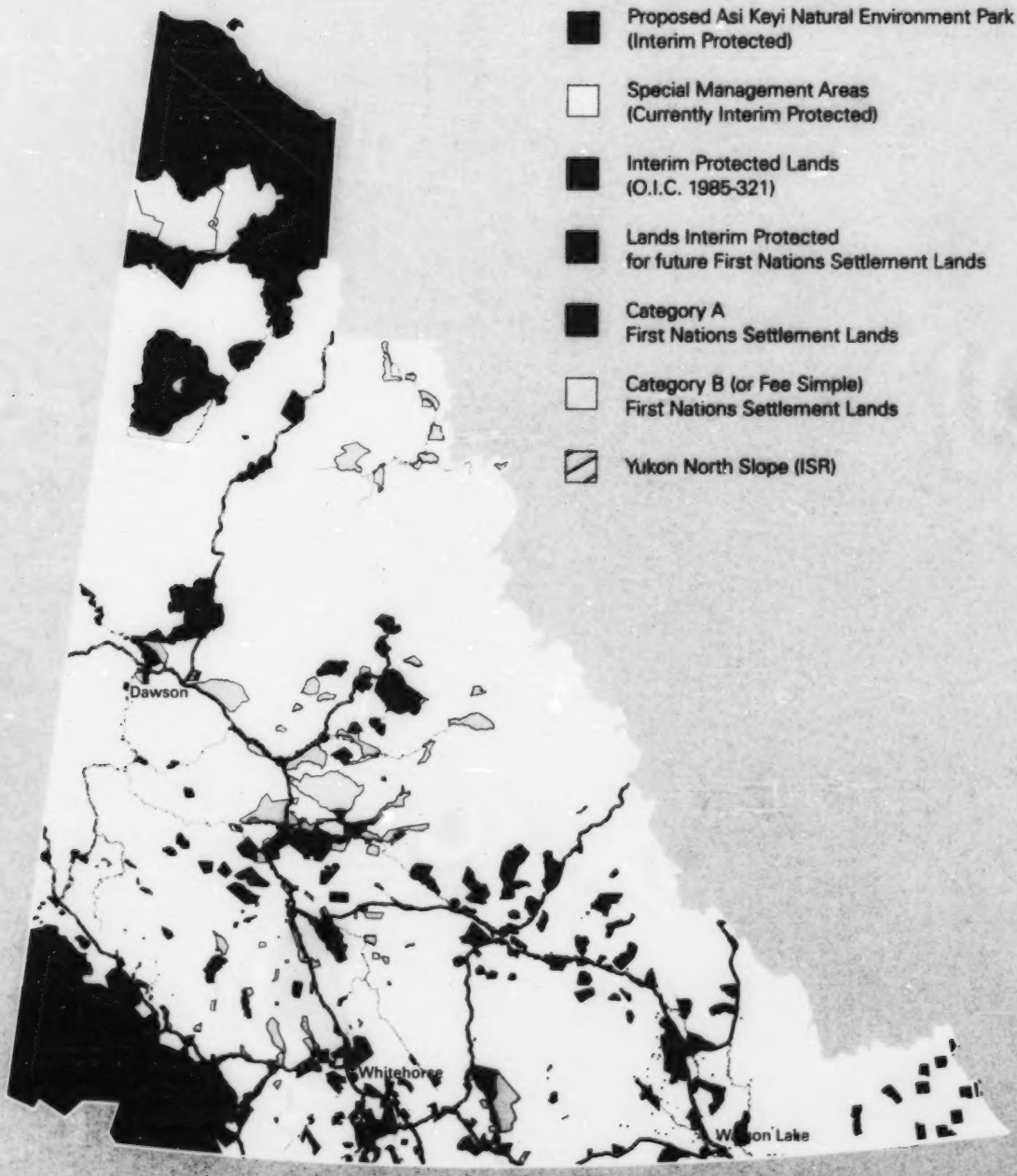
left – sweet pea *YTG photo*
right – Jade Mine seen from the Campbell Highway *YTG photo*

The Yukon government understands the uncertainty that lengthy land use planning processes can have on the investment climate. Understandably, investors want to know that the research and hard work that goes into finding a mineral deposit does not occur in an area being considered for possible protection. That is why the Yukon government has committed to the following measures:

> areas with high mineral potential and existing mineral claims will be avoided wherever possible;
> should mining claims be affected, government will offer compensation based on fair market value;
> all remaining areas of interest for protected areas will be identified by spring 2003;
> regional resource assessments must be completed as part of the process of identifying areas of interest;
> government is committed to ensuring reasonable access for resource development; and
> only one area of interest will be identified for each of the remaining 13 regions that require protection.



Yukon Land Status Map



November 2001

Bernie Kreft prospecting at Hit Property *Ken Galambos photo*

The placer mining industry is an essential component of a healthy and diverse mining industry. As a whole, it represents approximately 125 operations, mostly family-owned and run businesses. The placer industry is responsible for most of the 16 million ounces of gold that the Yukon has produced since the turn of the century. In recent years, these operations have produced $23 to $50 million worth of gold and employed an estimated 400 – 700 people annually.

Yukon Placer Mining Industry

The continuing survival of the placer industry can be attributed, in part, to the Yukon Placer Authorization (YPA) and the work of the Yukon Placer Committee (YPC). The YPC serves as a model of how Yukon stakeholders can work together in resolving difficult conflicts.

The YPC consists of key stakeholders and includes the Yukon Conservation Society, Council of Yukon First Nations, Klondike Placer Miners' Association, federal Department of Fisheries and Oceans and Department of Indian Affairs and Northern Development, and the Yukon government.

The YPA establishes a regime to regulate the sediment discharge from placer mines, which allows mining to continue while protecting fish and fish habitat. Compliance with the YPA is intended to ensure that authorized placer mining sediment discharges and approved stream channel alterations have no significant adverse impacts, including cumulative ones, on fish and fish habitat, and is considered adequate mitigation with respect to the *Canadian Environmental Assessment Act*.

OUR GOALS:

- ensure the placer mining industry can continue to operate under a renewed Yukon Placer Authorization satisfactory to the stakeholders on the Yukon Placer Committee;
- ensure the preservation and restoration of Yukon fisheries;
- encourage cooperative resource management that protects fish and fish habitat while allowing placer mining to continue; and
- ensure continued cooperation between government departments in the inspections and enforcement of discharge standards.

OUR PLANS:

The Yukon continues to support the Yukon Placer Committee in anticipation of the review of the Yukon Placer Authorization. The Yukon government is also increasing support to the Klondike Placer Miners' Association to help address the many complex issues facing this important industry.

top – Dan Klippert at DCK Property *Ken Galambos photo*
bottom – floating dredge at 40 Mile River *Ken Galambos photo*

Yukon Mineral Compensation Policy

Claim holders need to know their rights and options when government makes land use decisions that affect their interests or the ability to access their mineral claims. The first fundamental principle of the MINE Plan speaks to the importance of access to land for mineral exploration and development and that certainty of mineral tenure is critical to ensuring continued investment. In addition, there is a commitment in the Yukon Protected Areas Strategy to deal with limitations to existing rights and interests in a fair and equitable manner.

OUR GOAL:
To ensure that claim holders are treated fairly when access and mineral tenure rights are affected by land withdrawals supported by the Yukon government.

OUR PLAN:
The Yukon Minerals Compensation Policy provides a voluntary way for claim holders to receive compensation when their interests are negatively affected by land withdrawals. The policy is based on the principle of fair market value as determined by a professional.

A copy of the policy can be obtained from the Yukon government.

Whitehorse Mining Initiative and the MINE Plan

The Yukon MINE Plan is consistent with the goals of the Whitehorse Mining Initiative (WMI) Leadership Accord. The accord was adopted in 1994 by national mining industry associations; by the Yukon government and other Canadian jurisdictions; and by labour organizations, national First Nations organizations and environmental groups across the country.

The accord envisions a thriving mining industry, respect for healthy and diverse ecosystems and the sharing of opportunities with Aboriginal people. The accord also addresses industry investment; regulatory and tax regimes; environmental practices; protected areas; worker health and safety and standard of living; treaty rights; land claims; stakeholder participation; and change in the industry.

While this plan may not address all of the commitments under the WMI, significant progress is being made in many areas.

Further information can be obtained from the Yukon government.

OUR MINE PLAN – INFORMATION

The foundation of government support for industry is providing quality information on the Yukon's geology and mineral resources.

YUKON
GEOLOGY PROGRAM

The Yukon Geology Program is a partnership between the Geological Survey of Canada, Department of Indian Affairs and Northern Development, and the Yukon government. Jointly funded and managed by the Yukon government and DIAND, the program conducts geological mapping and sampling programs, and other technical studies towards an improved understanding of the Yukon's geology and mineral resources. The information generated is used by industry to locate mineral deposits and by government in land-use planning processes.

Technical Liaison Committee

The Technical Liaison Committee consists of key industry stakeholders and university and government experts in Yukon geoscience. The committee works together to provide recommendations for plans and projects conducted by the Yukon Geology Program.

OUR GOAL:

To provide quality geoscience information to industry to support new discoveries.

OUR PLAN:

Supporting the Yukon Geology program.

The Yukon government, in partnership with Natural Resources Canada and DIAND, provides a high quality database of information about the geology, geochemistry and minerals of the Yukon. This information is essential to support the exploration industry's search for new mines. It is also used to assist in making responsible land-use decisions. Quality geoscience information helps the government make good planning decisions. It is also an important marketing tool to promote interest in areas with potential for mining activities.

The Yukon government acknowledges the valuable role of the Yukon Geology Program. Funding support to this program has been continued and services increased through cooperative partnerships with Natural Resources Canada. These partnerships have generated additional programs such as the Targeted Geoscience Initiative, a $400,000 airborne geophysical survey in the Dawson area to stimulate gold exploration, and the central foreland NATMAP project in the Wolf Lake area north of Teslin.

In addition, plans for this coming season include bedrock geological mapping, surficial and placer studies, mineral deposit studies, airborne geophysical studies, public education and community outreach.

The results of the work of the program are published annually in Yukon Exploration and Geology. The latest edition is available from the Yukon Geology Program office.

GIS technician at a field camp, Finlayson region *YTG photo*

massive sulphide, Wolverine Lake *Don Murphy photo*

OUR GOAL:
To help investors and Yukon residents understand the opportunities that development of Yukon resources can bring.

OUR PLAN:
Initiating the *Explore Yukon!* Regional Mineral Development Program.

The Yukon contains some of the best mineral potential in North America. Much of this potential is well known only to prospectors and companies who are already active in the Yukon and are familiar with the information available through the Yukon Geology Program.

Explore Yukon! will attract new interest in the Yukon by compiling and promoting the Yukon's best known potential in a comprehensive and user-friendly way:

> Selwyn Basin Lead Zinc Belt hosts some of the world's best untapped potential for zinc. It contained the huge Faro deposit, and the world's largest undeveloped zinc resource at Howard's Pass. A new generation of zinc processing technology is likely to make deposits in this area much more attractive in the mineral industry in the next few years.

> Dawson Range Copper-Gold Belt hosts two advanced projects: the Minto copper project and the Carmacks copper project. The huge Casino copper-gold deposit is also located in this area. Development of the existing resources, coupled with excellent potential for future discovery of additional deposits, position this region to be an important copper mining camp in the Yukon.

> Tintina Gold Belt extends across central Yukon into Alaska. This belt contains mineral deposits rich in gold, silver, tin, copper and tungsten. Mines in the Tintina Gold Belt have produced more than 30 million ounces of gold and 190 million ounces of silver. In addition, there are 40 million ounces of gold resource that have been identified on many promising mineral properties. The Yukon contains some of the best potential for the discovery of additional resources.

> Finlayson Massive Sulphide District. This area sparked the Yukon's biggest staking rush in 1995-1996, after the discovery of the Kudz Ze Kayah deposit by Cominco. Since that time five significant deposits have been identified, including the world's richest massive sulphide deposit at Wolverine Lake. There is excellent potential for more important discoveries. This area is an emerging mining belt rich in zinc, lead, gold, silver and cobalt.

> Kluane Nickel, Copper, PGE Belt. This region includes the Wellgreen deposit, a resource of more than 50 million tonnes containing copper, nickel, platinum and palladium.

> Tungsten. The Yukon contains 15 per cent of the world's known tungsten reserves, including the western world's largest known tungsten deposit at Macmillan Pass, on the North Canol road near the border with the Northwest Territories.

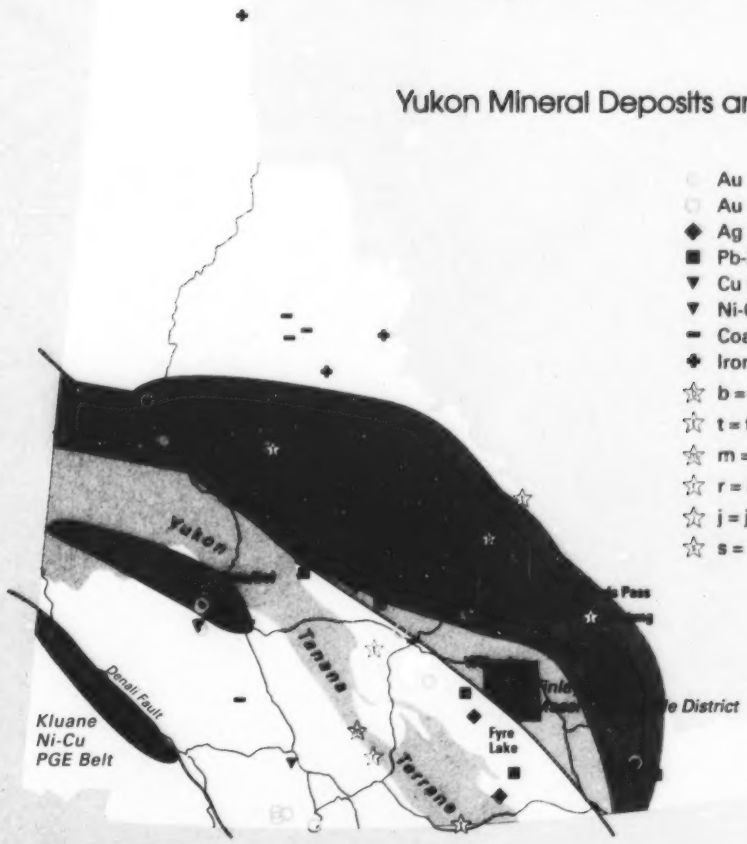
This new initiative is funded by the Yukon government, but works in partnership with the Department of Indian Affairs and Northern Development and Natural Resources Canada. The objective is to focus worldwide attention on the most promising mineral districts in the Yukon, such as the Selwyn Basin Zinc Belt, the Tintina Gold Belt, the Finlayson Lake Massive Sulphide Belt and the Carmacks Copper Belt. The project is designed to:

- update and complete regional and local mapping to modern standards in each district;
- complete mineral deposit studies and deposit models of each district;
- establish infrastructure development requirements for each district, including power, roads, rail and communications requirements; and
- publish the comprehensive findings on the world wide web.

Bringing Yukon geoscience to the world on the Web

This year, almost all of the information on Yukon geology, geophysics and geochemistry will be available on the Yukon Geology Program website, which is easy to find from our new portal: www.yukonmining.com.

Yukon Mineral Deposits and Selected Metallogenic Belts



OUR MINE PLAN – INCENTIVES

Incentives such as favourable taxation are critical to ensuring the Yukon is a destination of choice for mining investors.

Much of the fiscal benefit to government comes from taxation associated with direct and indirect employment and business activity created by mineral exploration, mine development and production. Each job in the mining sector creates approximately $28,500 in revenue to the federal government annually. This revenue can then be used for roads, schools, social programs and other services to the public.

The royalties and taxes paid on mining operations are profit-based; therefore, the revenue to government from corporate taxation is tied directly to the profitability of mining companies.

Competitive Taxation

Mining is a high-risk enterprise. Exploration is expensive and companies are attracted to jurisdictions with competitive tax regimes so that an acceptable rate of return on invested capital can be earned. It is important to build a competitive regime so that companies are encouraged to make a long-term commitment that will lead to positive net benefits for the Yukon economy.

It is more challenging for the Yukon to compete with larger jurisdictions that have significantly higher financial resources when designing and delivering programs.

The Yukon has already acted quickly by playing a key role in securing a national 15 per cent exploration tax credit in the October 2000 federal mini-budget. The Yukon also extended and increased the refundable Yukon Mineral Exploration Tax Credit to 25 per cent.

OUR GOAL:
Work towards further improvements to the Yukon's tax regime for mineral resources.

OUR PLAN:
The Yukon is currently leading a coordinated effort with the other northern territories and the federal government to examine if further adjustments are necessary to the national exploration tax credit to ensure the North remains competitive within Canada in attracting exploration investments.

eft - Yukon Mineral Incentives Program, Tanana Exploration drilling on Big Top property *Ken Galambos photo*
ight – *YTG photo*
pposite – *Yukon Archives, Hare Collection*

Bill Harris *Harris photo*

Bill Harris, a well known Yukon prospector, on the success of the Yukon Mining Incentives Program:

"Through this program, the Ellen property was discovered, prospected and sampled on a prospecting grant. It was further developed with a Target Evaluation grant for prospecting, line-cutting, grid preparation and geophysics. Results of that program were excellent and after several years of our own work on the property, another grant was received for prospecting, grid work, blast trenching and geophysics. This program led directly to...an IPO with the Ellen Property, with about $400,000 spent in a two-year program."

Finding the Yukon's Mineral Wealth

Yukon prospectors have played a key role in the political and economic development of the Yukon, starting with the discovery of gold in the Klondike in 1898. The impressive success of Yukon prospectors led to the development of mines. The network of roads that connect a number of communities in the Yukon today were built to supply the mines. Many Yukon communities flourished as service and supply centres for the exploration and development of Yukon minerals.

The Yukon's undiscovered mineral resources will only be found though the application of modern prospecting techniques. Yukon prospectors have the knowledge and experience to apply their skills in the search for minerals.

The Yukon Mining Incentives Program is designed to encourage the discovery of Yukon's mineral wealth. An investment of $442,000 in this program has already helped generate $11.7 million in advanced exploration work. Yukon prospectors are responsible for the discovery of more than 2700 mineral showings including 80 mineral deposits with identified reserves.

OUR GOAL:

To ensure there is a good program to support Yukon prospectors searching for new mineral wealth.

OUR PLAN:

The Yukon government is committed to continued funding support for the Yukon Mineral Incentive Program.

OUR MINE PLAN – INFRASTRUCTURE

Infrastructure is essential to ensure the Yukon can access and develop its rich natural resources. Roads, power, rail, communications and pipelines are all important components.

Nahanni Range Road *YTG photo*

Providing new access roads to resource projects can sometimes provide new challenges for wildlife management as local hunters also take advantage of the new roads. One solution has been the agreement between the Yukon government, the Ross River Dena Council and the owner of the Kutz Ze Kayah deposit southwest of Ross River. Local access is carefully controlled by the First Nation. In addition, the road is to be fully reclaimed after the deposit is mined.

Future development cannot take place unless there is a provision for future access. Identifying areas where infrastructure can be provided is simply good planning. By anticipating access requirements and selecting suitable corridors now, we can help minimize the land use conflicts in the future.

Infrastructure to support northern projects can be costly, and the needs of each project must be assessed on a case-by-case basis. Many factors will influence specific decisions to construct infrastructure. These can include the economic and social benefits that the project might bring. In some cases the infrastructure requirements may be beyond the ability of the Yukon government to finance. In these circumstances governments and the proponent must work together to ensure each is covering an equitable share of the infrastructure capital and operating costs.

OUR GOALS:

> to plan for the public infrastructure necessary to support the import of goods and services and the export of Yukon mineral products to market;

> to encourage resource investment by anticipating future infrastructure requirements through careful planning and strategic investments; and

> to develop infrastructure that supports northern businesses; and encourage competitive energy, transportation and northern goods and services.

OUR PLAN:

The Yukon government has initiated an Access Corridor Study. This study will help to coordinate planning, improve overall economics and mitigate environmental effects of resource development projects. The study will proceed on a regional basis, so that areas which are most likely to host development in the short term are dealt with first. When complete, this work will help land use planners understand and anticipate future access requirements and assist developers in identifying appropriate access options for project proposals.

Aishihik Dam *Yukon Energy Corp. photo*

OUR MINE PLAN - NETWORKING/COMMUNICATIONS

The Yukon must listen carefully to understand the needs of the industry and all Yukoners when designing programs and policies. The Yukon must also let the world know about our opportunities and the benefits of doing business here in a globally competitive environment.

OUR GOALS:

> to ensure industry and government are working together to increase exploration and development in the territory;

> to ensure government is providing good information about Yukon investment opportunities; and

> to ensure government understands the needs of industry in the design of programs and policies.

OUR PLANS:

Supporting the work of the Yukon Minerals Advisory Board.

top – examining core samples *YTG photo*
bottom – Minister Scott Kent (left) at Wolverine project *YTG photo*

In order for the Yukon to promote a competitive mining industry, it is critical that the Yukon government receive quality policy advice that reflects a broad base of the Yukon mining sector.

The Yukon Minerals Advisory Board (YMAB) enhances the advice government currently receives from industry. It provides government with a broad range of advice from the perspective of individuals, companies and industry associations with experience operating in the mineral sector. This helps ensure that the Yukon government has a clear understanding of the concerns of the mineral industry.

The Yukon Minerals Advisory Board members are appointed by the Minister of Economic Development. YMAB includes representatives from the Yukon Chamber of Mines, the Klondike Placer Miners' Association, senior representatives from companies with Yukon mineral exploration projects and/or mines, senior representatives from the junior mining sector and other individuals with at least five years experience in various aspects of the minerals industry.

The Yukon Minerals Advisory Board makes recommendations to the Minister on measures, including government actions, to increase mineral exploration and mine development in the Yukon. The Board may also make recommendations on specific matters referred to it from time to time by the Minister, and undertake other initiatives, such as conferences and public workshops on mineral development matters, as requested by the Minister.

helicopter demobilizing exploration camp *DIAND photo*

A healthy mining industry impacts very little land.

> Mining claims historically cover less than five per cent of the Yukon in any given year.

> Historically mine sites comprise 0.3 per cent of the land. In the Yukon this land can generate more than $200 million annually in mineral production value.

> Since 1886 in the Yukon, only two per cent of mineral occurrences explored have led to mineral production, many of which were very small operations.

> New mining land-use regulations combined with low impact exploration techniques can ensure successful exploration with little environmental impact.

> Roads to mining properties can create a negative impact on wildlife by providing easy hunting access from local communities. Exploration and mining companies now routinely submit plans under the mining land use regulations that provide for exploration roads to be reclaimed after the completion of the exploration program.

OUR MINE PLAN – EDUCATION

Education to the public, communities and industry about the benefits and opportunities that come with Yukon mining will lead to more investment by industry and more opportunities for Yukoners.

Providing Good Public Information About Minerals and Mining

All stakeholders need access to high quality, relevant and understandable information grounded in sound science to make informed and responsible decisions during the life cycle of a mine.

The public is increasingly called upon to provide input to government on all aspects of mining development proposals. Mining is a sequential use of land. A combination of modern mining practices, appropriate environmental mitigation and reclamation can ensure that Yukon people benefit from resource development activity without compromising the environment.

OUR GOAL:

To ensure all Yukoners have access to good, balanced information about the Yukon's mineral resources and mining.

OUR PLANS:

The Yukon government is initiating the *Rocking in the Yukon* campaign. This is designed to assist industry and government to communicate to Yukon people about how environmental regulations, research, and the global economy are changing mining and how mining activities affect the Yukon economy and environment.

left – Yukon Geology Program School Tours *YTG photo*
left – forme drilling site *DIAND photo*

above – Yukon Geology Program school tours *YTG photo*
below – Yukon's Gold Dredge on Bonanza Creek, 1913 *Dawson City Museum, Vesco Collection*

Supporting Research and Good Public Information About Yukon Mining

OUR GOAL:

Improve environmental performance at mine sites through research and education.

OUR PLAN:

The Yukon government will continue to support environmental research and public information through the Yukon Mining Environment Research Group (MERG).

Established by the government in 1998, the Mining Environment Research Group is a voluntary, cooperative working group of government agencies, mining companies, First Nations and non-government organizations. MERG helps participants pool resources and knowledge on mine-related environmental issues and identifies and prioritizes research needs.

Supporting Public Education on the Benefits of Mining to the Yukon

> The Yukon helped support the Great Canadian Mine Show, which toured the Yukon in the spring of 2001 as part of Mining Week.

> The Yukon government is assisting the Klondike Placer Miners' Association in a public information campaign to raise awareness of the role placer mining plays in the Yukon.

> The Yukon government is sponsoring presentations in Yukon schools of the educational IMAX film, Gold Fever, which highlights the role gold has played in the Yukon, from the Gold Rush to modern day prospecting.

> The Yukon participated in the first Northern Latitudes Mining Reclamation workshop in the fall of 2001. This conference brought scientists from across the Canadian North and Alaska together to share ideas about how mine sites can be reclaimed effectively.

Promoting Economic Opportunities for Yukon People

The mining industry creates jobs, transferable skills and expanded business opportunities. The key with this cyclical industry is to manage the benefits from the mining industry in good years to help communities diversify for times when activity levels are down.

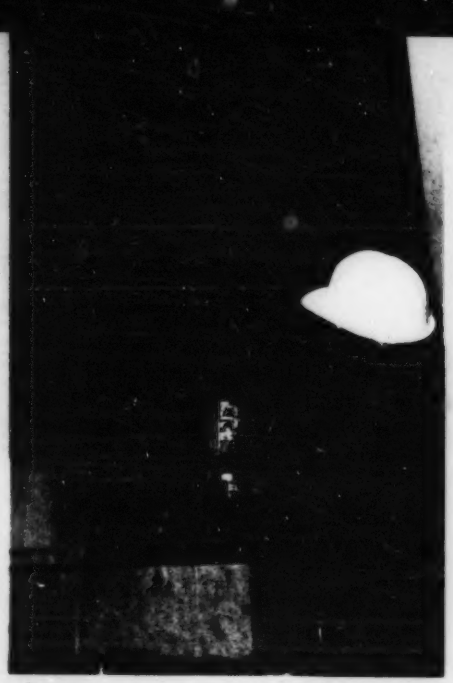
The phrase "economic opportunity" means jobs, training and education. Economic opportunities also vary depending on the stage of a mine's development.

Promoting Sustainable Development

The term "sustainable development" emerged from the 1987 report of the UN's World Commission on Environment and Development (also known as the Brundtland Commission), entitled *Our Common Future*. It means simply "...to meet the needs of the present without compromising the ability of future generations to meet their own needs." The idea of sustainable development gained momentum from the UN's 1992 Conference on Environment and Development (UNCED), held in Rio de Janeiro. Sustainable development calls for the integration of three principles into all public policy: (1) economic growth; (2) environmental protection; and (3) social equity. This is outlined in *The Rio Declaration* which sets forth 27 guiding principles to achieve this integration.

What does sustainable development mean for the mining industry?

In addition to operating in a manner that is environmentally and socially sustainable, the mining industry must replace depleted reserves through exploration. On a world-wide basis the mining industry has historically continued to find more deposits than the reserves being mined, but within Canada this is not the case. Deposits are being mined faster than they are being found. This is one of the strongest arguments in favour of improving the investment climate for exploration and mining in Canada in general and the Yukon in particular. Increased expenditures are required in order to find and develop new deposits to keep the Canadian industry sustainable. There are implications for Canada if the domestic mining industry is not sustained. This country will become increasingly dependent upon imported raw materials. Also we will effectively be exporting mining jobs, as well as exporting environmental impacts and pollution problems, because many mines are developed in other countries that have lower environmental standards than Canada.



YTG photo

The stages of mine development and employment opportunities

Grassroots exploration:

> aircraft charters
> camp supplies
> line-cutting and surveys
> geological and geophysical consulting services
> laboratory analysis
> prospecting services
> expediting services
> fuel supplies
> advanced computer applications (remote sensing, computer modelling)

Advanced exploration, add:

> heavy equipment contracts
> drilling contracts and supplies
> environmental services
> underground exploration and development

Mine construction, add:

> carpentry
> plumbing installations
> electrical installations
> road construction
> trucking services
> surveying
> equipment supplies and services

Mine operation, add:

> mill wrights
> truck drivers
> heavy-duty mechanics

COMPANION DOCUMENTS

Yukon Minerals Compensation Policy

The Yukon government recognizes that security of mineral tenure is of fundamental importance to the mining industry and that the mining industry needs a stable and clearly defined policy framework to attract mining investment. Establishing an efficient, fair, timely and equitable minerals compensation process is intended to remove an element of uncertainty for those who have invested or want to invest in the Yukon's mineral industry.

The Whitehorse Mining Initiative and the MINE Plan: a quick review

This paper outlines how the Yukon MINE Plan incorporates the goals of the Whitehorse Mining Initiative (WMI) Leadership Accord. The accord envisions a thriving mining industry, respect for healthy and diverse ecosystems and the sharing of opportunities with Aboriginal people. The accord also addresses industry investment; regulatory and tax regimes; environmental practices; protected areas; worker health and safety and standard of living; treaty rights; land claims; stakeholder participation; and change in the industry. The MINE plan addresses many of the commitments under the WMI.

The Minerals and Metals Policy of the Government of Canada: partnerships for sustainable development

This policy document describes, within areas of federal jurisdiction, the government's role, objectives and strategies for the sustainable development of Canada's mineral and metal resources.

Rocking-In-the-Yukon: an overview of mining in the Yukon

Published by the Yukon government, this booklet is an introduction to mineral resources in the Yukon. It is an overview of where minerals are found, what metals are common in the Yukon, how the industry adjusts to global market changes and how environmental regulations affect mineral exploration and development.

The Yukon Mining Industry: a background paper

This paper on the Yukon mineral industry is a compilation of technical and statistical information on the past and present state of the Yukon's mining industry. It provides an overview of the global mining industry from a supply and demand perspective and examines the mining industry at a national and territorial level. The paper also details various aspects of the Yukon's mining industry, including the role of the Yukon Geology program, taxation, mining trends and Yukon government programs to support the mining sector.

Administrative Procedures for the Environmental Assessment of Major Mining Projects in Yukon

Published by the Department of Indian Affairs and Northern Development, this document outlines recent improvements that have been made in response to recommendations made by the mineral industry.

These documents can be obtained by contacting:

Government of the Yukon
Box 2703
Whitehorse, Yukon Y1A 2C6

phone: (867) 667-5466
toll free: 1-800-661-0408 ext. 5466
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e-mail: mining@gov.yk.ca